

**CLAIMS:**

1. A method comprising:  
processing a graphic file to identify elements of a packaging layout;  
generating information that associates the elements with types of data fields of a packaging template;  
presenting an interface for populating the data fields of the packaging template with the elements in accordance with the information to form a packaging record; and  
communicating the packaging record to an output location for printing packaging material.
2. The method of claim 1, wherein processing the graphic file comprises parsing the graphic file to identify graphical elements and textual elements.
3. The method of claim 1, further comprising:  
storing the elements within a packaging data management system;  
selecting one or more of the elements based input received from the user; and  
generating the packaging record to identify the selected elements.
4. The method of claim 1, wherein generating information comprises:  
presenting a reconciliation interface to receive input that maps each of the elements to a respective one of the types of data fields of the packaging template; and  
generating the information based on the input, wherein the information describes the mapping between the elements and the types of data fields of the packaging template.
5. The method of claim 4, wherein presenting a reconciliation interface comprises presenting the reconciliation interface to include a display area that illustrates the packaging layout.
6. The method of claim 5, further comprising generating the display area to include graphical indicators for each of the identified elements of the packaging layout.

7. The method of claim 5, further comprising:  
assigning each of the elements with a unique identifier; and  
generating the display area to graphically label each of the elements with the corresponding identifier.
8. The method of claim 4, wherein presenting a reconciliation interface comprises presenting the reconciliation interface to include an element description area that lists the elements identified within the graphic file.
9. The method of claim 4, wherein presenting a reconciliation interface comprises presenting the reconciliation interface to include a data type assignment area having a set of inputs for assigning the graphical elements to respective types of the data fields of the packaging template.
10. The method of claim 9, further comprising generating the inputs of the data type assignment area to include drop-down menus that list the types of data fields of the packaging template.
11. The method of claim 1, further comprising:  
storing the elements within a packaging data management system;  
storing the information within a searchable database of the packaging data management system;  
accessing the searchable database based input received via the interface to locate and select one or more of the elements for the packaging record; and  
generating the packaging record to include the selected elements.
12. The method of claim 1, further comprising printing the packaging material at the output location in accordance with the packaging record.
13. The method of claim 12, wherein printing the packaging material comprises printing a label.

14. The method of claim 1, wherein communicating the packaging record comprises communicating the packaging record to a manufacturing facility via a network.
15. The method of claim 1, wherein generating information comprises generating the information as metadata in accordance with a data description language.
16. The method of claim 15, wherein generating the information as metadata comprises generating the information as metadata in accordance with the eXtensible Markup Language (XML).
17. A packaging data management system comprising:
  - a set of packaging templates having data fields selected from a set of data field types;
  - an artwork importation module that processes a graphic file to identify elements of a packaging layout, wherein the artwork importer generates information that associates each of the elements with a respective one of the data field types of the packaging templates;
  - a record manager that presents an interface by which a user selects one of the packaging templates and populates the data fields of the selected packaging template with the elements based on the information to form a packaging record; and
  - an output manager that communicates the packaging record to an output location to control printing of a packaging material.
18. The packaging data management system of claim 17, wherein the artwork importer parses the graphic file to identify graphical elements and textual elements.
19. The system of claim 17, wherein the artwork importation module presents a reconciliation interface to receive input that maps each of the elements to a respective one of the data field types, and generates the information based on the input to describe the mapping.

20. The packaging data management system of claim 19, wherein the reconciliation interface includes a display area that illustrates the packaging layout.
21. The packaging data management system of claim 20, wherein the display area includes graphical indicators for each of the identified elements of the packaging layout.
22. The packaging data management system of claim 20, wherein the artwork importation module assigns a unique identifier to each of the elements, and generates the display area to graphically label each of the elements with the corresponding identifier.
22. The packaging data management system of claim 19, wherein the reconciliation interface includes an element description area that lists the elements identified within the graphic file.
23. The packaging data management system of claim 19, wherein the reconciliation interface includes a data type assignment area having a set of inputs for assigning the graphical elements to respective types of the data fields of the packaging template.
24. The packaging data management system of claim 23, wherein the inputs of the data type assignment area comprise drop-down menus that list the types of data fields of the packaging template for selection by the user.
25. The packaging data management system of claim 17, further comprising:
  - a server to store the elements; and
  - a database to store the information,wherein the record manager accesses the database based input received via the interface to locate and select one or more of the elements for the packaging record.
26. The packaging data management system of claim 17, wherein the output location comprises a manufacturing facility.

27. The packaging data management system of claim 17, wherein the artwork importation module generates the information as metadata in accordance with a data description language.
28. The packaging data management system of claim 27, wherein the artwork importation module generates the metadata in accordance with the eXtensible Markup Language (XML).
29. The packaging data management system of claim 17, further comprising a rules engine to validate the packaging records in accordance with a set of rules.
30. An online packaging data management system comprising:
  - means for centrally storing packaging templates that define a set of data field types;
  - means for processing a packaging layout to identify elements;
  - means for mapping the elements to the data field types of the packaging templates;
  - and
  - means for generating a packaging record from the elements, the packaging templates, and the mapping.
31. The online packaging data management system of claim 30, further comprising means for printing packaging material in accordance with the packaging record.
32. A computer-readable medium comprising instructions to cause a processor to:
  - process a graphic file to identify elements of a packaging layout;
  - generate information that associates the elements with types of data fields of a packaging template;
  - present an interface for populating the data fields of the packaging template with the elements in accordance with the information to form a packaging record; and
  - communicate the packaging record to an output location for printing packaging material.

33. The computer-readable medium of claim 32, further comprising instructions to cause the processor to:

present a reconciliation interface to receive input that maps each of the elements to a respective one of the types of data fields of the packaging template; and

generate the information based on the input, wherein the information describes the mapping between the elements and the types of data fields of the packaging template

34. The computer-readable medium of claim 33, further comprising instructions to cause the processor to present the reconciliation interface to include a data type assignment area having a set of inputs for assigning the graphical elements to respective types of the data fields of the packaging template.

35. The computer-readable medium of claim 32, further comprising instructions to cause the processor to generate the information as metadata in conformance with a data description language.